Attorney's Docket No.: 15670-029US1/SD2003-252

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Chung-Kuan Cheng, et al.   Art Unit: Unassigned
Serial No.: 10/558,842   Examiner: Unassigned
Filed   : November 29, 2005
Title   : CIRCUIT NETWORK ANALYSIS USING ALGEBRAIC MULTIGRID
             APPROACH

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants call attention to the attached Information

Disclosure Statement and documents listed on form PTO-1449.

This filing is being made before the receipt of a first

Office action on the merits. No fee is required.

The documents are in the English language; hence no concise

explanation is necessary per Rule 98(a)(3).

Consideration of the foregoing and enclosures plus the
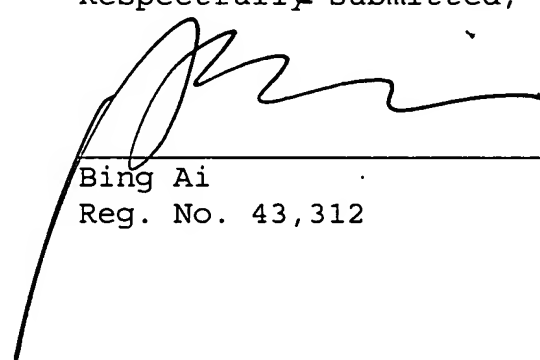
return of a copy of the enclosed form PTO-1449 with the

Examiner's initials in the left column per MPEP 609 are earnestly solicited along with an early action on the merits.

Please apply any additional charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date:April 18, 2006

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-029US1	Application No. 10/558,842
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Chung-Kuan Cheng, et al.	
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U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,577,992	06//10/03	Tcherniaev et al.			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No
	AB	2004/109452	12/16/04	PCT				

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AC	Black, J.R., "Electromigration Failure Modes in Aluminum Metalization for Semiconductor Devices," Proc. IEEE, pp. 1587-1594, Sept. 1969
	AD	Bobba et al., "IC power distribution challenges," IEEE/ACM International Conference on Computer Aided Design, pp. 643-650, (2001)
	AE	Brandt, A., "Multi-level adaptive solutions to boundary value problems," Math. Comput., 31: 333-390 (1977)
	AF	Briggs, W.L., "A Multigrid Tutorial," SIAM 2000, http://www.llnl.gov/casc/people/henson/mgtut/ps/mgtut.pdf (accessed on 04/06/06), 119 pages
	AG	Cao et al, "HiPRIME: Hierarchical and Passivity Reserved Interconnect Macromodeling Engine for RLKC Power Delivery," IEEE/ACM Design Automation Conference, pp. 379-384, (2002)
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	AI	Chen, T. and C. Chen, "Efficient Large-Scale Power Grid Analysis Based on Preconditioned Krylov-Subspace Iterative Methods," IEEE/ACM Design Automation Conference, pp. 559-562, (2001)
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	AK	Katopis, G.A., "Delta-I Noise Specification for a High-performance Computing Machine," Proc. Of the IEEE, Vol. 73, pp. 1450-1415, 1985 [Meditech, "Correction to: Katopis, G.A., 'Delta-I Noise Specification for a High-performance Computing Machine,' Proc. Of the IEEE, Vol. 73, pp. 1450-1415, 1985," Proceedings of the IEEE 70(12): 1864 (December, 1985) attached following Katopis article]
	AL	Kozhaya et al., "Multigrid-like technique for power grid analysis," IEEE/ACM International Conference on Computer Aided Design, 2001. ICCAD 2001, November 4-8, 2001, San Jose, California, pp. 480-487
	AM	Kozhaya et al., "A multigrid-like technique for power grid analysis," IEEE Transactions on Computer-Aided Design of Integrated Circuits, Volume 21, Issue 10, pp. 1148-1160, October 2002

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	AN	La Scala et al., "A relaxation type multigrid parallel algorithm for power system transient stability analysis," IEEE International Symposium on Circuits and Systems, 1989. May 8-11, 19989, Portland, Oregon, Volume 3, pp. 1954-1957 (1989)
	AO	La Scala, M. and A. Bose, "Relaxation/Newton methods for concurrent time step solution of differential-algebraic equations in power system dynamic simulations," IEEE Transactions on Circuits and Systems 1: Fundamental Theory and Applications, Volume 40, Issue 5, pp. 317-330 (May, 1993)
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	AT	Stuben, K., "A review of algebraic multigrid," Journal of Computational and Applied Mathemactics,vol. 128 (No. 1-2): 281-309 (March 1, 2001)
	AU	Stuben, K., "Algebraic Multigrid (AMG): An Introduction with Applications," GMD Report No. 70 (November 1999), 127 pages.
	AV	Taylor, S., "The Challenge of Designing Global Signals in UDSM CMOS," IEEE Custom Integrated Circuits Conference, San Diego, CA, pp. 429-435, (1999)
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	AZ	Zhu et al., "Power network analysis using an adaptive algebraic multigrad approach," Proceedings of the Design Automation Conference, 2003, San Diego, California, June 2-6, 2003, pp. 105-108

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